

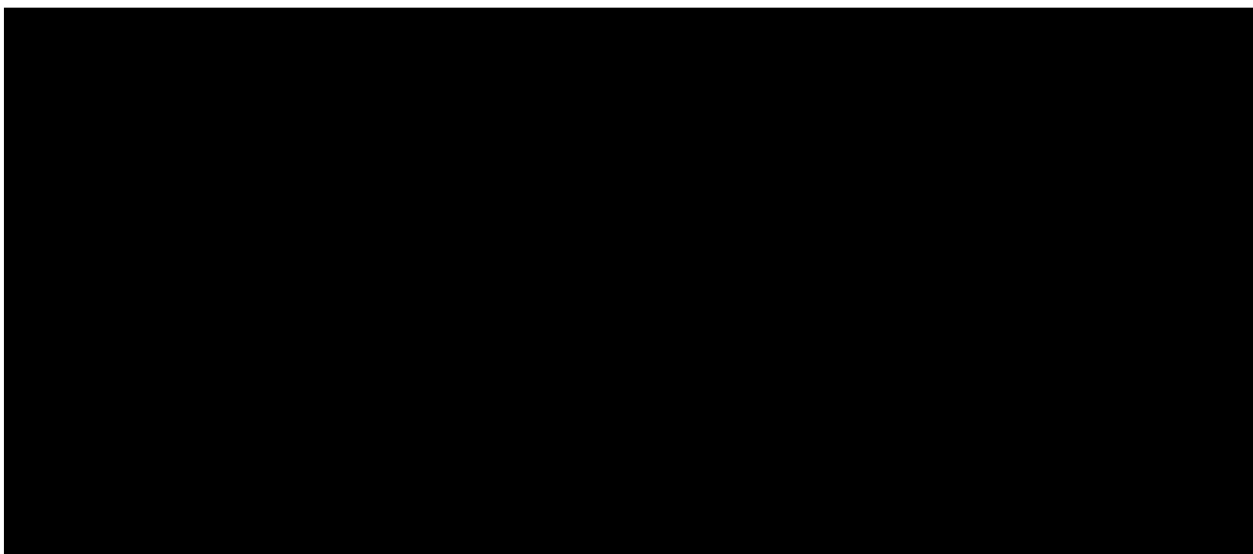
SECRET

11037

1 July 1966

HIGH PRECISION STEREO COMPARATOR -- Explanatory Notes:

- 25X1D
1. Most comparators cannot handle over 10" x 10" format.
 - a. Staff Study, page 1, paragraph 2a.
 - b. There are exceptions, but the statement is obviously true.



4. Why 10" x 20"?
 - a. Staff Study, page 1, paragraph 2b.
 - b. This specific dimension is somewhat arbitrary. It is based on the 9" x 18" standard format. The extra dimensions are for increased handling speed and contingencies such as titling information that may appear at the end of the format. The cost of the extra 1/2" width is relatively insignificant. The cost of increasing the format by a significant amount such as 50% would be very expensive and would begin to get into unproven design conditions. Making the length shorter would require too much time-consuming repositioning on our long format systems.

Declass Review By NIMA/DOD

SECRET

Approved For Release 2001/04/02 : CIA-RDP78B04747A000200040001-5

5. Point Transfer Device - "same unsatisfactory film holddown system."

- a. Staff Study, page 2, third paragraph.
- b. This is a poorly stated and ambiguous. What is meant is that the film holddown system used on both the Fiber Optics Viewer and the Point Transfer Device (which were developed simultaneously) is unsatisfactory for the performance objectives of the High Precision Stereo Comparator.

25X1A 6. Results of [REDACTED] Studies.

- a. Staff Study, page 2, paragraph 3c.
- b. This matter is discussed in general in the reference. Detailed evaluation reports, including conferences with TID, are on file.

7. Worst case error combination - 4.42μ

- a. Technical Specifications, Tab B, page 6.
- b. This is a straight forward error analysis of the system showing the resultant if all sources of error are additive. This error applies to a 20" dimension so it is within the 1 part in 100,000 accuracy specification. I see no ambiguity here.

8. Anticipated life - usefulness.

- a. No reference.
- b. This equipment will require considerable maintenance due to its complexity - possibly as much as \$25,000 a year at first. As long as high resolution film images are our inputs, this device will represent the most advanced means of measuring them for at least five years. It is probable that its useful life will be about ten years. All these estimates are based on the assumption that it will work.

9. Small digital computer - has IPD seen this?

- a. Staff Study, page 3, paragraph 3f.
- b. Reference cites IPD coordination. Extensive coordination has been accomplished. This small self-contained computer is only used in the automatic correlation logic and doesn't affect the on-line requirements of the mensuration system.

Approved For Release 2001/04/02 : CIA-RDP78B04747A000200040001-5